## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re App. of: Bernd Wahle et al. Examiner: Amina S. Khan

App. No.: 10/826,646 Conf. No.: 2294 Group Art Unit: 1796

Filed: April 16, 2004 Atty Docket No.: C 2827 US

(P40073 USA)

For: Use of Alkoxylated Polyol Derivatives

for Treating Textiles

## DECLARATION OF WERNER MAUER UNDER 37 C.F.R. 1.132

I. Werner Mauer, declare and state that:

- 1. I am a co-inventor of this invention. I am currently employed by Cognis GmbH as a head of an application lab for home care applications in the Care Chemicals department. I have held the position of a head of an application lab for about 10 years, before that I have worked 6 years at another chemical company in a comparable position. I have a diploma degree since 1993 in chemical engineering / textile chemistry from FH Niederrhein in Krefeld, Germany. I have extensive experience with alkoxylated polyol derivatives. I also have extensive experience in the field of textiles and textile treatments.
- 2. I am aware of U.S. Patent Application Serial No. 10/826,646 and have reviewed the claims currently pending therein. I understand that claims 37, 46-47, 49-50, 53 and 55-57 of this application have been rejected as allegedly being obvious over Benisek et al. (US 4,448,817; "Benisek") and Lewis (US 3,933,421). I have reviewed these publications and the processes disclosed therein.
- 3. The Examiner has stated that "one of ordinary skill would be motivated to add the instantly claimed concentration for **additional shrink resisting properties**" (Office Action, page 4, fourth paragraph; emphasis added), and "one of ordinary skill would expect similar fabrics treated with similar chemical compositions by similar

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method steps would be provided with **similar benefits** to the fabrics by the chemical composition" (Office Action, page 5, fourth paragraph; emphasis added). And further, that "the teaching of exhaustion or padding would provide the textiles with the requisite washing or cleaning as impurities would be removed during immersion and during the pickup during padding (Office Action, page 4, bottom paragraph)."

4. As a co-inventor of the present invention, and one skilled in the art, I attest to the following facts. As commonly understood in the art, pilling and shrink resistance are two entirely different properties of a textile. Pilling is the tendency of a textile to form pills, typically round balls or knots of fibers. Pilling is caused by loose ends of fibers interacting with each other during washing as well as during wearing. Pills affect the appearance of a textile, but not the function.

Shrink resistance is an important feature of the textile with regard to **function**. If a textile shrinks, it becomes too small or irregular for the wearer, and thereby looses its function. Shrinkage occurs during washing (that is, when wet), and **not during** wearing. As the fibers swell when wet, the fabric relaxes into its natural form, free of tension. For wool, and certain other fibers subject to shrinkage, the individual relaxed fibers can bind to each other easily when wet, thereby increasing the tension when the fabric dries and causing shrinkage.

Thus, one skilled in the art would consider pilling and shrink resistance to be separate and unrelated properties of a textile.

5. I further attest to the following facts. With regard to the Examiner's assertion that padding and exhaustion are equivalent to "washing", it is commonly understood in the art that these textile finishing operations are distinct from "washing" or "laundering". Padding is a **forced impregnation** of a textile with a bath containing a compound or compounds in a specific concentration. The textile is soaked in the bath and squeezed through rollers. The wet uptake by weight of the textile corresponds to the concentration of the compounds in the bath.

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Exhausting is a process step with the object of **applying** a product or compound via affinity or ionic charge attraction. Examples of this type include the cationic fabric softeners added to the last rinse of a washing cycle.

Both of these processes are designed and optimized to **add** certain compounds or compositions to the textile.

In contrast, washing/laundering is designed and optimized to **remove** soil, dirt, etc. from fabric. Thus, one skilled in the art would not equate padding or exhaustion with washing/laundering. The objects of these processes are diametrically opposed to one another.

- 6. In addition, I attest to the following facts. Regarding the temperature of drying in a commercial clothes dryer, one skilled in the art would know that **air** drying would be at a temperature between about 20 and 30°C. A tumble dryer set to the program "colors" is commonly known in the art to operate at a temperature between about 60 and 70°C. This is basic knowledge in the art.
- 7. I hereby declare that all statements made herein of my knowledge are true and that all statements made on information and belief are believed to be true, and further that the statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under § 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.